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Total Number of Pages in This Submissi	ion	Attorney Docket N	umber	034300-000172	
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Fee Attached	Licensing-related Papers			Appeal Communication to Board of Appeals and Interferences	
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Atty Docket No: 034300-000172



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	
Ping Liu) Examiner: Chun Cao
Serial No.: 09/954,612) Art Unit: 2115
Filing Date: September 12, 2001))
For: Mechanism for Wireless Modem Power Control	
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AMENDED APPEAL BRIEF IN SUPPORT OF APPELLANT'S APPEAL

Dear Sir/Madam:

The Appellant hereby submits this Amended Appeal Brief in support of appeal in response to the Notice of Non-Compliance dated November 16, 2006. The Appellant hereby submits the entire Appeal Brief with corrections in light of the Notice dated November 16, 2006. The Appellant respectfully requests consideration of this Amended Appeal Brief to allow the above captioned matter to proceed to the Board of Patent Appeals and Interferences for allowance of the above referenced application.

REAL PARTY IN INTEREST

The real party in interest is Sierra Wireless, Incorporated, a Canadian Corporation, which is the assignee of the present patent application.

RELATED APPEALS AND INTERFERENCES

NONE

STATUS OF CLAIMS

The above-mentioned application originally contained 24 claims. Claims 1-8, 11, 14, 15 and 24 are cancelled. Claims 25-29 were added. Claims 9, 10, 12, 13, 16-23 and 25-29 are pending in the application and set forth in the Appendix hereto. Claims 9, 16, and 25 are independent claims.

Under the final rejection mailed on April 25, 2006, claims 9, 10, 12, 13, 16-23 and 25-29 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,768,605 to Fuller et al. (Fuller) in view of U.S. Patent No. 6,573,868 to Johnson et al. (Johnson).

The Appellants appeal the above rejection regarding claims 9, 10, 12, 13, 16-23 and 25-29 with respect to the 35 U.S.C. § 103(a) rejections and hereby traverse every ground of rejection set forth in the final rejection.

STATUS OF AMENDMENTS

No amendment has been filed subsequent to final rejection. A Notice of Appeal From The Examiner to the Board of Patent Appeals and Interferences was filed from the decision dated April 25, 2006 of the Examiner rejecting claims 9, 10, 12, 13, 16-23 and 25-29.

SUMMARY OF THE CLAIMED SUBJECT MATTER

One or more embodiments are is recited in claims 9, 10, 12, 13, 16-23 and 25-29 and their equivalents. The present section of this Appeal Brief is set forth merely to comply with the requirements of 37 C.F.R. § 1.192(c)(5) and is not intended to limit claims 9, 10, 12, 13, 16-23 and 25-29 in any way. See MPEP § 1206.

In an embodiment recited in Independent Claim 9, a method of controlling power to a peripheral device 10 insertable into a host device 12. (Page 5, Lines 17-19; Figs. 1 & 2). The method includes simulating an insertion of the peripheral device 10 with a switch 14 by generating an inserted signal upon extension of an antenna 22 of the peripheral device 10. (Page 6, Lines 7-21; Figs. 1 & 2). The host device 12 supplies power to the peripheral device 10, wherein extension of the antenna 22 moves a lever 20 coupled to the switch 14 to generate the inserted signal. (Page 4, Lines 7-9; Figs. 1& 2). The method includes simulating a removal of the peripheral device 10 with the switch 14 by generating a removed signal upon retraction of the antenna 22 of the peripheral device 10. (Page 7, Lines 20-24; Figs. 1 & 2). Retraction of the antenna 22 moves the lever 20 such that the switch 14 causes the host device 12 to terminate power to the peripheral device 10 and antenna 22. (Page 4, Lines 1-5; Figs. 1 & 2).

In an embodiment recited in Independent Claim 16, a power control for a peripheral device 10 insertable within a host device 12. (Page 3, Lines 21-23; Figs. 1 & 2). The power control includes means for simulating an insertion (14, 16, 18, 20, 22) of the peripheral device 10 into host device 12 upon extension of an antenna 22 of the peripheral device 10. (Page 6, Lines 6-17; Figs. 1 & 2). The power control includes means for simulating a removal (14, 16, 18, 20, 22) of the peripheral device 10 from host device 12 upon retraction of the antenna 22 of the peripheral device 10. (Page 6, Lines 17-21; Figs. 1 & 2). The power control includes a lever 20 configured to detect positioning of the antenna 22 between the extended and retracted positions, wherein the host device 12 is capable of powering the peripheral device 10 when the antenna 22 is extended and wherein the host device 12 does not power the peripheral device 10 and the antenna 22 when the antenna 22 is retracted. (Page 7, Lines 8-19; Figs. 1 & 2).

In an embodiment recited in Independent Claim 25, a peripheral device 10 adapted to be insertable into a host device 12 includes a body 10 adapted to be selectively removable from the host device 12. (Page 5, Lines 18-19; Figs. 1 & 2). The peripheral device 10 includes an antenna 22 coupled to the body 10 and moveable between a first position and a second position. (Page 6, Lines 24-25; Figs. 1 & 2). The peripheral device 10 includes a circuit (14, 16, 18) within the body 10 and configured to sense positioning of the antenna 22 in the first or second position, the circuit (14, 16, 18) configured to provide an inserted signal to the host device 12 when the antenna 22 is in the first position such that the host device 12 provides power to the peripheral device 10 in response to the inserted signal, the circuit (14, 16, 18) configured to generate a removed signal to the host device 12 when the antenna 22 is in the second position such that the host device 12 does not provide power to the peripheral

device10 and the antenna 22 in response to the removed signal. (Page 6, Lines 6-25 to Page 8, Lines 1-13; Figs. 1 & 2).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether the rejection under 35 USC §103(a) to claims 9, 10, 12, 13, 16-23 and 25-29 over Fuller in view of Johnson is proper.

ARGUMENTS

For the purpose of the rejection and the appeal, claims 9, 10, 12, 13 16-23 and 25-29 stand together.

In assessing obviousness under 35 U.S.C. § 103(a), inquiries should be made into the scope and content of the prior art and the differences between the claimed invention and the prior art. Graham v. John Deere, 383 U.S. 1 (1966). According to the Manual of Patent Examining Procedure (M.P.E.P.),

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

M.P.E.P. 2141, See <u>Hodosh v. Block Drug Co., Inc.</u>, 786 F.2d 1136 (Fed. Cir. 1986) (When applying a 35 U.S.C. 103 rejection, the following tenets of patent law must be adhered to: the claimed invention must be considered as a whole; the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and reasonable expectation of success is the standard with which obviousness is determined.)

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but

whether the claimed invention as a whole would have been obvious. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530 (Fed. Cir. 1983). Thus, when considering the whole prior art reference its entirety, portions that would lead away from the claimed invention must be considered. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983) (emphasis added), See M.P.E.P. 2141.02. Thus, it is improper to combine references where the references teach away from their combination. In re Grasselli, 713 F.2d 731 (Fed. Cir. 1983).

The scope and content of the cited prior art.

Fuller discloses a PCMCIA card which has a switch 350, as shown in Figure 7. A connector 364 receives a wired communication cable 368 when the connector 364 is at an extended position. (Fuller, Figure 7). Fuller describes that when the connector 364 is in the extended position, node A 382 is decoupled from node B 381, whereby voltage is provided to the card 340. In contrast, when the connector 364 is in the retracted position, node A 382 is coupled to node B 381, whereby voltage is not provided to the card 340. (Fuller, Col. 5, Lines 10-25).

Johnson discloses a PCMCIA card having an antenna which is able to move between an extended and retracted position, whereby power is provided to the antenna when the antenna is extended. (Johnson, Figures 6A-6B). In particular, Figures 6A and 6B show a control switch 150 which prevents the antenna system from receiving or transmitting wireless information when the antenna is in the retracted position. (Johnson, Col. 12, Lines 49-53). Also, the control switch 150 allows the antenna system to receive and transmit wireless information when the antenna is in the extended position. (Johnson, Col. 12, Lines 54-55).

Johnson states that the control switch 150 governs operation of the antenna system and not the entire card, whereby power is still provided to the card even though the antenna is retracted and not-powered by the host device. (Johnson, Col. 12, Lines 54-55).

Fuller and Johnson cannot be combined to render Claims 9, 16 and 25 obvious.

The Appellants provide Independent Claims 9, 16 and 25 below for the purposes of convenience. The full set of claims are found in the Claims Appendix attached hereto.

Claim 9 recites, *inter alia*, a method of controlling power to a peripheral device insertable into a host device, the method comprising the steps of: simulating an insertion of the peripheral device with a switch by generating an inserted signal upon extension of an antenna of the peripheral device such that the host device supplies power to the peripheral device, wherein extension of the antenna moves a lever coupled to the switch to generate the inserted signal; and simulating a removal of the peripheral device with the switch by generating a removed signal upon retraction of the antenna of the peripheral device, wherein retraction of the antenna moves the lever such that the switch causes the host device to terminate power to the peripheral device and antenna.

Claim 16 recites, *inter alia*, a power control for a peripheral device insertable within a host device, the power control comprising: means for simulating an insertion of the peripheral device into host device upon extension of an antenna of the peripheral device; means for simulating a removal of the peripheral device from host device upon retraction of the antenna of the peripheral device; and a lever configured to detect positioning of the antenna between the extended and retracted positions, wherein the host device is capable of powering the peripheral device when the antenna is extended and wherein the host device does not power the peripheral device and the antenna when the antenna is retracted.

Claim 25 recites, *inter alia*, a peripheral device adapted to be insertable into a host device comprising: a body adapted to be selectively removable from the host device; an antenna coupled to the body and moveable between a first position and a second position; a circuit within the body and configured to sense positioning of the antenna in the first or second position, the circuit configured to provide an inserted signal to the host device when the antenna is in the first position such that the host device provides power to the peripheral device in response to the inserted signal, the circuit configured to generate a removed signal to the host device when the antenna is in the second position such that the host device does not provide power to the peripheral device and the antenna in response to the removed signal.

I. Fuller and Johnson teach away from one another

The Appellant submits that one skilled in the art would not find any motivation to combine Fuller with Johnson. As stated above, Johnson expressly discloses that the communications card is still able to receive power after the antenna has been retracted and the card receives the signal to no longer provide power only to the antenna itself. (Johnson, Col. 4, Lines 4-10; Col. 12, Lines 58-60). This disclosure in Johnson expressly teaches away from the limitation of "terminating power to the peripheral device and the antenna", as recited in Independent Claims 9, 16 and 25.

Figures 9-12B in Johnson further illustrate that power continues to be delivered to the card when the antenna is retracted by disclosing other embodiments. For instance, in Figure 9, power will need to be provided to the card 304 even when antenna 300 is retracted such that power can be delivered to antenna 308. Likewise, in Figures 10-12B, the card includes an integrated RJ series connector jack (353, 403, 458), a modular antenna or a combination thereof. Johnson expressly states that the antenna in Figure 11 works in the same manner than the other antennas described therein. (Johnson, Col. 15, Lines 40-41). Therefore, power is still applied to the card from the host device to allow the RJ connector jack to operate when the antenna is retracted.

The Applicant understands that the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives if such disclosure does not criticize, discredit, or otherwise discourage the solution claimed. In re Fulton, 391 F.3d 1195 (Fed. Cir. 2004). However, that is not the case with the Johnson reference. Upon considering the Johnson reference in its entirety, as required under W.L. Gore & Associates, the other embodiments in Johnson stated above support the entire card still being powered even when the antenna is fully retracted and not powered. In fact,

Johnson does not provide any alternative embodiment where power is terminated to both the card and the antenna when the antenna is retracted. Considering that Johnson must be considered in its entirety, including portions which lead away from the claimed invention, one skilled in the art cannot use Johnson in reaching the embodiments recited in Claims 9, 16 and 25. W.L. Gore & Associates.

Thus, Johnson does not provide the motivation to one skilled in the art to use Johnson with another reference in reaching the inventions in Claims 9, 16 and 25. Considering that Johnson taken as a whole teaches away from the embodiments claimed in Claims 9, 16 and 25, it is improper to combine Fuller and Johnson in attempting to establish a prima facie case of obviousness to Claims 9, 16 and 25.

II. There is No Suggestion or Motivation in Combining Fuller and Johnson in reaching the subject matter recited in Claims 9, 16, and 25

Fuller discloses that power is not applied to the card when the coupler 364 is retracted. Fuller expressly states in its Background section that PCMCIA cards undesirably consume power at all times, and that the card in Fuller overcomes this disadvantage. (Fuller, Col. 1, Lines 64-67 to Col. 2, Lines 1-15). In other words, the goal of Fuller is to provide a PCMCIA communication card which receives no power when no means for communication is connected to the card. (Fuller, Col. 2, Lines 24-32).

In contrast, Johnson describes providing power to the card even when the antenna is retracted and not powered. One skilled in the art reading Johnson would find a card device which still drains power from the host device when the antenna is retracted and not operating. Thus, one skilled in the art, upon reading Johnson would find Johnson an unsuitable

reference in trying to develop the device or method recited in Claims 9, 16, and 25. In other words, one skilled in the art trying to develop the device or method in Claims 9, 16, and 25 will not want the card to continue to operate and thereby drain power from a laptop battery when the antenna is retracted and no wireless communications are occurring. Thus, there is no motivation provided in Johnson to cause one skilled in the art to attempt to combine Johnson with Fuller, and the mere notion that Fuller and Johnson can be combined is not sufficient to determine a prima facie case of obviousness. In re Mills, 916 F.2d 680 (Fed. Cir. 1990) (Although the prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so."). For at least these reasons, one skilled in the art would not find motivation to combine Fuller and Johnson upon reviewing the two prior art references.

III. Fuller and Johnson together do not teach each and every limitation in Claims 9, 16, and 25

Although Johnson teaches away from Fuller and thereby cannot be combined with Fuller to reach the claimed subject matter, Fuller and Johnson, if combined, does not teach each and every limitation in Independent Claims 9, 16, and 25. Claim 9, recites "wherein retraction of the antenna moves the lever such the switch causes the host device to terminate power to the peripheral device and antenna." Claim 16 recites "wherein the host device does not power the peripheral device and the antenna when the antenna is retracted." Claim 25 recites "the circuit configured to generate a removed signal to the host device when the antenna is in the second position such that the host device does not provide power to the peripheral device and the antenna in response to the removed signal."

As stated above, Johnson teaches that power is still applied to the peripheral device after the antenna is retracted. Accordingly, the combination of Fuller with Johnson does not teach or suggest each and every limitation recited in the above paragraphs with respect to Independent Claims 9, 16 and 25. In other words, Fuller and Johnson, if combined, do not teach that power is no longer provided to the card and antenna when the antenna is retracted. Considering that the examiner has not met this requirement of the obviousness analysis, a prima facie case of obviousness cannot be said to be satisfactorily made. Hodosh.

Accordingly, Claims 9, 16, and 25 are patentable over Fuller and Johnson, individually or in combination.

SUMMARY

For at least the reasons stated above, the 35 USC 103 obviousness rejection to claims 9, 10, 12, 13, 16-23 and 25-29 is improper and should be withdrawn. Appellants respectfully submits that all appealed claims in this application are patentable and requests that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of the rejected claims.

FEES

The fee of \$500.00 to cover the fee for filing a Notice of Appeal required under 37 C.F.R. § 1.17(e) was previously submitted with a prior Notice of Appeal filed on August 25, 2006. The Notice of Appeal was filed with a request for extension of time and an appropriate fee. A credit card form authorizing a charge in the amount of \$500.00 to cover the fee for filing of a brief in support of an appeal required under 37 C.F.R. § 1.17(c) and 1.192 was filed with the original Appeal Brief dated October 31, 2006. If there are any further charges not accounted for herein, please charge them to our deposit account No. 50-1698.

Respectfully submitted,

Dated: 12 (8/64)

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DEC 21 2006 By Claims 1-8 (Cancelled)

CLAIMS APPENDIX

- 9. (Previously Presented) A method of controlling power to a peripheral device insertable into a host device, the method comprising the steps of:
- a) simulating an insertion of the peripheral device with a switch by generating an inserted signal upon extension of an antenna of the peripheral device such that the host device supplies power to the peripheral device, wherein extension of the antenna moves a lever coupled to the switch to generate the inserted signal; and
- b) simulating a removal of the peripheral device with the switch by generating a removed signal upon retraction of the antenna of the peripheral device, wherein retraction of the antenna moves the lever such that the switch causes the host device to terminate power to the peripheral device and antenna.
- 10. (Original) The method of claim 9 wherein the switch is in electrical communication with detecting pins of the host device and step (a) further comprises generating the inserted signal on the detecting pin and step (b) further comprises generating the removed signal on the detecting pins.
- 11. (Cancelled)
- 12. (Previously presented) The method of claim 10 wherein step (a) comprises generating the inserted signal by forming a low voltage signal on the detecting pin of the host

device and step (b) comprises generating the removed signal by forming an open circuit on the detecting pin of the host device.

- 13. (Original) The method of claim 12 wherein the low voltage signal is a ground potential.
- 14. (Cancelled)
- 15. (Cancelled)
- 16. (Previously Presented) A power control for a peripheral device insertable within a host device, the power control comprising:

means for simulating an insertion of the peripheral device into host device upon extension of an antenna of the peripheral device;

means for simulating a removal of the peripheral device from host device upon retraction of the antenna of the peripheral device; and

a lever configured to detect positioning of the antenna between the extended and retracted positions, wherein the host device is capable of powering the peripheral device when the antenna is extended and wherein the host device does not power the peripheral device and the antenna when the antenna is retracted.

17. (Original) The power control of claim 16 wherein the means for simulating insertion and the means for simulating removal is a switch.

- 18. (Original) The power control of claim 17 wherein the switch is operative to generate a signal simulating the removal and insertion of the peripheral device.
- 19. (Original) The power control of claim 18 wherein the switch is in electrical communication with a detecting pin of the host device and the switch is operative to generate the signal on the detecting pin.
- 20. (Original) The power control of claim 19 wherein the switch is operative to generate an inserted signal simulating the insertion of the peripheral device and a removed signal simulating the removal of the peripheral device.
- 21. (Original) The power control of claim 20 wherein the switch is operative to generate an open circuit as the removed signal and a low voltage level as the inserted signal.
- 22. (Original) The power control of claim 21 wherein the low voltage level is a ground potential.
- 23. (Original) The power control of claim 22 wherein the switch detects the position of the antenna in order to generate the inserted and removed signals.
- 24. (Cancelled)
- 25. (Previously Presented) A peripheral device adapted to be insertable into a host device comprising:

a body adapted to be selectively removable from the host device;

an antenna coupled to the body and moveable between a first position and a second position;

a circuit within the body and configured to sense positioning of the antenna in the first or second position, the circuit configured to provide an inserted signal to the host device when the antenna is in the first position such that the host device provides power to the peripheral device in response to the inserted signal, the circuit configured to generate a removed signal to the host device when the antenna is in the second position such that the host device does not provide power to the peripheral device and the antenna in response to the removed signal.

- 26. (Previously Presented) The peripheral device of claim 25 wherein the circuit is electrically connected to detecting pins of the host device to simulate to the host device whether the peripheral device is inserted or removed from the host device.
- 27. (Previously Presented) The peripheral device of claim 25 wherein the circuit is operative to generate an open circuit as the removed signal and a low voltage level as the inserted signal.
- 28. (Previously Presented) The peripheral device of claim 27 wherein the low voltage level is a ground potential.
- 29. (Previously Presented) The peripheral device of claim 25 wherein the peripheral device is a PCMCIA card.

EVIDENCE APPENDIX

NONE

RELATED PROCEEDINGS APPENDIX NONE